

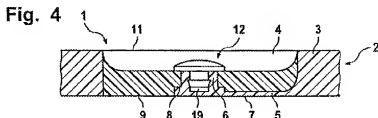
REMARKS

In response to the office action dated May 28, 2009, Applicants have amended claims 34, 35, 37, 38, and 51-53 and cancelled claims 32 and 33. Claims 2, 5, and 36 were previously cancelled. Claims 1, 3, 4, 6-31, 34, 35, and 37-54 are presented for examination.

Applicants thank the Examiner for acknowledging that claims 3, 11, 17, 25, and 26 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Embodiment of Applicants' Electrical Appliance Housing

Referring to Fig. 4 of Applicants' application, which is reproduced below, an embodiment of Applicants' electrical appliance housing includes a hard plastic housing body 2 having in its wall 3 an aperture 4 and an elastic bar 5 having a free end extending into the aperture 4. See, e.g., U.S. 2006/0060461, ¶¶ [0007] and [0041]-[0043]. The housing further includes a base 6, a soft plastic membrane 9, and an actuating button 12. See, e.g., id., ¶¶ [0041]-[0045]. The base 6 is secured to the bar 5, and the actuating button 12 is fastened to the base 6. See, e.g., id., ¶¶ [0042], [0045]. The membrane 9 is molded over the elastic bar 5 and around the base 6 and seals the aperture 4 in a water tight manner. See, e.g., id., ¶¶ [0005], [0006], and [0044]. As a result, as show in Fig. 4, for example, the membrane 9 is bonded directly to the elastic bar 5 and the base 6.



The elastic bar 5 can make it easier to position the base 6 in the aperture 4. See, e.g., id., ¶ [0007]. Additionally or alternatively, the elastic bar 5 can support the membrane 9 to reduce

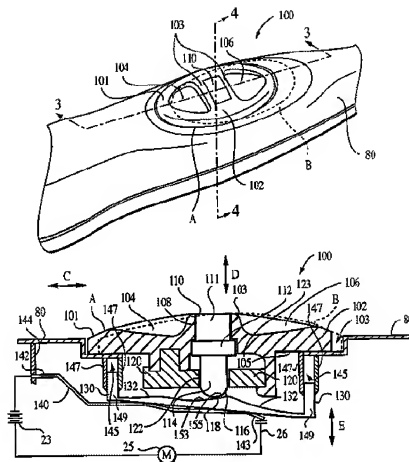
the formation of creases in the membrane or to limit the amount of yielding of the membrane.

See, e.g., id.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 4, 7-10, 12-16, 18-21, 24, 28, 30, 39-41, and 45-47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan, U.S. Patent No. 6,993,803 (“Chan”) in view of Katsumi, U.S. Patent No. 6,369,341 (“Katsumi”). However, Chan and Katsumi, taken alone and in combination, fail to disclose or render obvious a housing body defining an aperture, **a soft plastic membrane configured to seal the aperture, and at least one elastic bar securing a base to the housing body**, wherein the membrane is directly bonded to the base and the elastic bar, as required by these claims.

Referring to Chan’s Figs. 2 and 3 below, Chan discloses an actuator assembly 100 for an electric toothbrush. (See, e.g., Chan, col. 4, lines 44-47). The actuator assembly 100 includes a movable switch member 102 that is slideably disposed within a recess 103 of a housing 80 such that the switch member 102 can be moved between positions A and B in the direction of arrow C. (See, e.g., id., col. 4, lines 52-61). Sliding the switch member 102 to position A causes the toothbrush to operate in a first mode of operation, and sliding the switch member 102 to position B causes the toothbrush to operate in a second mode of operation. (See, e.g., id., col. 7, lines 5-61). The actuator assembly 100 also includes an auxiliary guide member 120 that defines an aperture 122 that is aligned with an aperture 108 of the switch member 102 to receive a depressible member 110. (See, e.g., id., col. 5, lines 24-30). According to Chan, a water proof liner can be applied over the entire outer face 101 of the switch member, and the outer edges of the liner can be attached to the housing 80. (See, e.g., id., col. 5, lines 18-23).



In the office action, the Examiner equates Chan's housing 80 and switch member 102 to Applicants' claimed housing body and membrane, respectively. However, Chan's switch member 102 is not configured to seal the aperture formed in the housing 80. The switch member 102 is arranged to slide back and forth relative to the housing 80. Chan acknowledges that this arrangement does not seal the aperture and explicitly states that a separate liner can be used to seal the aperture in the housing 80. In addition, one skilled in the art would not have modified Chan's actuator assembly 100 to provide a switch member that seals the aperture. For example, one skilled in the art would have understood that such an arrangement would negatively impact the ability of the switch member 102 to slide back and forth relative to the housing 80. Thus, Chan fails to disclose or render obvious a soft plastic membrane configured to seal an aperture defined by a housing body, as alleged by the Examiner.

The Examiner further equates Chan's guide member 120 with Applicants' claimed base and elastic bar, which secures the base to the housing body. In particular, the Examiner equates the right side portion of the Chan's guide member 120 with the claimed elastic bar, and equates the remainder of the guide member 120 with the claimed base. However, the right side portion of Chan's guide member 120 does not secure the remainder of the guide member 120 to the housing 80. In fact, no portion of the guide member 120 is secured to the housing 80. Both the right and left sides of the guide member 120 appear to be secured only to the switch member 102. Thus, even if the right side of Chan's guide member 120 could be considered a bar and the remainder of the guide member 120 could be considered a base, which Applicants do not concede, Chan still fails to disclose a bar that secures a base to a housing body. Nor would it have been obvious to one skilled in the art to provide such a bar that is bonded to the switch member 102. One skilled in the art would have understood that this arrangement would negatively affect the ability of the switch member 102 to slide back and forth with respect to the housing 80. Thus, Chan fails to disclose or render obvious at least one elastic bar securing a base to the housing body, as alleged by the Examiner.

The Examiner acknowledges in the office action that Chan fails to disclose a soft plastic membrane, but contends that it would have been obvious, in view of Katsumi, to provide such a feature. However, contrary to the Examiner's contention, one skilled in the art would not have modified Chan's actuator assembly 100 to include a soft plastic membrane. Chan's switch member 102 is constructed to slide back and forth along the housing 80. One skilled in the art would have recognized that forming the switch member 102 of a soft plastic material would have negatively impacted this function.

As evident from the discussion above, Chan and Katsumi, taken alone and in combination, fail to disclose or render obvious each and every limitation of independent claim 1. In addition to those reasons presented above, many of the claims depending from independent claim 1 are allowable over Chan and Katsumi for other reasons. Applicants discuss only some of those claims below. Applicants do not concede or mean to imply that the features of those dependent claims that are not separately discussed here are found in Chan and/or Katsumi.

With regard to claim 14, Chan does not disclose that his switch member 102 (considered by the Examiner to be the claimed membrane) is bonded to the housing 80. Nor would one skilled in the art have modified Chan's actuator assembly 100 to bond the switch member 102 to the housing 80. Such a modification would have inhibited the switch member 102 from sliding relative to the housing 80. Thus, one skilled in the art would have been discouraged from making such a modification.

With respect to claims 20 and 41, one skilled in the art, contrary to the Examiner's contention, would not have modified Chan's actuator assembly 100 to integrally mold or integrally form the guide member 120 with the housing 80. One skilled in the art would have understood that such a modification would have inhibited the switch member 102 from sliding relative to the housing 80. As a result, one skilled in the art would have been discouraged from making such a modification.

With respect to claim 30, one skilled in the art similarly would not have modified Chan's actuator assembly 100 to integrally extend the guide member 120 from the housing 80. One skilled in the art would have understood that such a modification would have inhibited the switch member 102 from sliding relative to the housing 80, and thus would have been discouraged from making such a modification.

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejection of claims 1, 4, 7-10, 12-16, 18-21, 24, 28, 30, 39-41, and 45-47 as being unpatentable over Chan in view of Katsumi.

Claims 29, 31, 42-44, and 48-50 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan in view of Katsumi. However, Chan and Katsumi, taken alone and in combination, fail to disclose or render obvious **a flexible membrane bonded to a housing body and a base to seal an aperture in a substantially liquid-tight manner, and at least one elastic bar securing the base to the housing body**, as required by these claims.

Chan fails to disclose a flexible membrane bonded to a housing body and a base to seal an aperture in a substantially liquid-tight manner, and one skilled in the art would not have modified Chan's actuator assembly 100 to include such an arrangement. One skilled in the art

would have understood, for example, that modifying Chan's actuator assembly 100 to bond the switch member 102 (considered by the Examiner to be the claimed membrane) to the housing 80 would have negatively impacted the ability of Chan's switch member 102 to slide back and forth with respect to the housing 80. As a result, one skilled in the art would have been discouraged from making such modifications to Chan's actuator assembly 100. Additionally, Chan fails to disclose at least one elastic bar securing a base to a housing body, and one skilled in the art would not have modified Chan's actuator assembly 100 to include such an arrangement. One skilled in the art would have understood, for example, that modifying Chan's actuator assembly 100 to secure the guide member 120 (considered by the Examiner to be the claimed base and elastic bar) to the housing 80 would have negatively impacted the ability of Chan's switch member 102 to slide back and forth with respect to the housing 80. As a result, one skilled in the art would have been discouraged from making such modifications to Chan's actuator assembly 100.

As evident from the discussion above, Chan and Katsumi, taken alone and in combination, fail to disclose or render obvious each and every limitation of independent claim 29. In addition to those reasons presented above, many of the claims depending from independent claim 29 are allowable over Chan and Katsumi for other reasons. Applicants discuss only some of those claims below. Applicants do not concede or mean to imply that the features of those dependent claims that are not separately discussed here are found in Chan and/or Katsumi.

With respect to claim 31, one skilled in the art would not have modified Chan's actuator assembly 100 to integrally extend the guide member 120 from the housing 80. One skilled in the art would have understood that such a modification would have inhibited the switch member 102 from sliding relative to the housing 80, and thus would have been discouraged from making such a modification.

With respect to claim 44, one skilled in the art similarly would not have modified Chan's actuator assembly 100 to integrally form the guide member 120 with the housing 80. One skilled in the art would have understood that such a modification would have inhibited the switch

member 102 from sliding relative to the housing 80. As a result, one skilled in the art would have been discouraged from making such a modification.

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejection of claims 29, 31, 42-44, and 48-50 as being unpatentable over Chan in view of Katsumi.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan in view of Katsumi further in view of Hochgesang et al., U.S. Patent No. 5,642,950 ("Hochgesang"). Claims 22 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan in view of Katsumi further in view of Buchan et al., U.S. Patent No. 6,064,019 ("Buchan"). Claim 27 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan in view of Katsumi further in view of Takano et al., U.S. Patent No. 5,382,767 ("Takano"). However, Hochgesang, Buchan, and Takano fail to cure the deficiencies of Chan and Katsumi discussed above. Thus, for at least the reasons discussed above, Applicants request reconsideration and withdrawal of these claim rejections.

Claims 32-35, 37, 38, and 51-54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hochgesang in view of Katsumi. As noted above, Applicants have cancelled claim 32 and 33, and claims 34, 35, 37, 38, and 51-53 have been amended to depend from claim 54. With respect to claim 54, Applicants first note that the Examiner previously considered both Hochgesang and Katsumi and indicated that the subject matter of claim 54 was allowable over those references. In fact, claim 54 was added in Applicants' previous response as a result of the Examiner's statement in the office action dated November 14, 2008 that the combination of features found in the previously presented claim 6 were allowable.

Hochgesang and Katsumi, taken alone and in combination, fail to disclose **at least one elastic bar securing a base to a housing body**, as required by claims 34, 35, 37, 38, and 51-54. Even if Hochgesang's housing 1 and key guidance frame 3 could be considered a housing body and Hochgesang's keys 4 could be considered a base, which Applicants do not concede, Hochgesang's holding clip 5, contrary to the Examiner's assertion, could not be considered an elastic bar that secures the base to the housing body. The holding clip 5 is provided for the

parallel guidance of the keys 4. (Hochgesang, col. 2, lines 8-9). There is no indication that the holding clip 5 is secured to the keys 4 and the housing 1 or guidance key frame 3. In addition, one skilled in the art would not have modified Hochgesang's keyboard to secure the holding clip 5 to the keys 4 and the housing 1 or guidance key frame 3. There is simply no indication in Hochgesang, Katsumi, or any other reference cited by the Examiner that such a modification would have been successful or desirable. Therefore, Applicants request reconsideration and withdrawal of the rejection of claim 54.

As evident from the discussion above, Hochgesang and Katsumi, taken alone and in combination, fail to disclose or render obvious each and every limitation of independent claim 54. In addition to those reasons presented above, certain claims depending from independent claim 54 are allowable over Hochgesang and Katsumi for other reasons. Applicants discuss only some of those claims below. Applicants do not concede or mean to imply that the features of those dependent claims that are not separately discussed here are found in Hochgesang and/or Katsumi.

With respect to claims 34 and 35, Hochgesang's holding clip 5 does not integrally extend from and is not integrally molded with the housing 1 or guidance key frame 3. In addition, one skilled in the art would not have modified Hochgesang's keyboard in a manner so that the holding clip 5 integrally extends from or is integrally molded with the housing 1 or guidance key frame 3. There is simply no indication in Hochgesang, Katsumi, or any other reference cited by the Examiner that such a modification would have been successful or desirable.

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejection of claims 32-35, 37, 38, and 51-54.

Please apply any charges or credits to deposit account 06-1050, referencing Attorney Docket No. 02894-0717US1.

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Respectfully submitted,

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